### Application Serial No: 10/647,654

## **REMARKS**

Applicants note with appreciation that Applicants' submission filed October 31, 2007 (received November 5, 2007) has been entered. Claims 1-3, 5, 6, 11-13, 23-26, and 49-81 constitute the pending claims in the present application.

### Interview Summary

Applicants thank the Examiner for courtesies extended during a telephonic interview conducted on February 25, 2008. During the interview, the eight way restriction requirement was discussed, and Applicants explained why certain of the groups should be rejoined. Examiner MacFarlane indicated that she would discuss the issue with her Supervisor. Following this discussion, the Examiner indicated that the restriction requirement was withdrawn, in part, and that certain of the previously restricted groups were rejoined. Applicants thank the Examiner and her Supervisor for reconsideration of the original restriction requirement.

Following rejoinder, the Examiner indicated that Applicants must elect from amongst the following four groups:

- I. Claims 1-3, 5, 6, 11-13, 23-26, and 49-81, drawn to methods for promoting proliferation, differentiation or survival of a dopaminergic or motor neuron, or promoting a cell to differentiate to a dopaminergic or motor neuron, comprising contacting said cell with a Sonic hedgehog polypeptide comprising SEQ ID NO: 8 or an N-terminal fragment thereof.
- II. Claims 1-3, 5, 6, 11-13, 23-26, and 49-81, drawn to methods for promoting proliferation, differentiation or survival of a dopaminergic or motor neuron, or promoting a cell to differentiate to a dopaminergic or motor neuron, comprising contacting said cell with a Sonic hedgehog polypeptide comprising SEQ ID NO: 11 or an N-terminal fragment thereof.
- III. Claims 1-3, 5, 6, 11-13, 23-26, and 49-81, drawn to methods for promoting proliferation, differentiation or survival of a dopaminergic or motor neuron, or promoting a cell to differentiate to a dopaminergic or motor neuron, comprising contacting said cell with a Sonic hedgehog polypeptide comprising SEQ ID NO: 12 or an N-terminal fragment thereof.

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IV. Claims 1-3, 5, 6, 11-13, 23-26, and 49-81, drawn to methods for promoting proliferation, differentiation or survival of a dopaminergic or motor neuron, or promoting a cell to differentiate to a dopaminergic or motor neuron, comprising contacting said cell with a Sonic hedgehog polypeptide comprising SEQ ID NO: 13 or an N-terminal fragment thereof.

In response to the revised restriction requirement, Applicants elect with traverse Group IV. Applicants elect Group IV with traverse because Groups I-IV are all directed to methods for using Sonic hedgehog polypeptides. Sonic hedgehog polypeptides are sufficiently related in terms of sequence, structure, and function that the subject matter of Groups I-IV can be searched simultaneously without significant additional burden.

Additionally, Applicants traverse and respectfully disagree that restriction to a single sequence is proper. The instant claims, for example claims 1-3 and 23, are Markush claims. The guidance provided by MPEP 803.02 suggests that, at most, a species election should be used to address the various embodiments (various Sonic hedgehog polypeptides) recited in the claims. Applicants' view is further supported by MPEP 808.01(a) ("Election of species <u>may</u> be required prior to a search on the merits (A) in applications containing claims to a plurality of species with no generic claims, and (B) in applications containing both species claims and generic or Markush claims."). Given that the instant claims, for example claims 1-3 and 23, are Markush claims reciting particular species of Sonic hedgehog polypeptides, Applicants submit that the present restriction requirement should, at most, be deemed an election of species for search purposes only. Accordingly, Applicants request that Applicants election of Group IV be deemed an election of species for search purposes only.

Applicants note that claims 1-3, 5, 6, 11-13, 23-26, and 49-81 read on the elected invention. Applicants additionally note that claims 66-81 are linking claims for the inventions of Groups I-IV. Applicants respectfully remind the Examiner that, in accordance with MPEP 809, upon allowance of a generic claim, all claims properly dependent thereon must be considered.

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#### **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Should an extension of time be required, Applicants hereby petition for same and request that the extension fee and any other fee required for timely consideration of this submission be charged to **Deposit Account No. 18-1945**, **under Order No. HMSU-P17-006**.

Date: February 29, 2008

Respectfully Submitted,

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